



## **REAL-TIME OCEAN PREDICTIONS IN SUPPORT OF NAVAL OPERATIONS**

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One of the Naval Research Laboratory (NRL) contributions to the MREA\_07 exercise in the Tyrrhenian Sea was to provide, in real-time, ocean forecasts in support of the operations at sea. The NRL prediction system, based on the relocatable version of the Navy Coastal Ocean Model (NCOM), was configured with 3 nesting domains at resolutions of 4, 2, and 0.6 km. Two separate inner nests were configured for the BP\_07 (Elba) and LASIE (LaSpezia) areas, respectively. For this application, no data were assimilated in real-time. We briefly discuss the main issues associated with real-time operations. Ocean forecast are usually the final component of a long string of products developed at several different centers: a delay in acquiring one of the input data, the classic computer breakdowns (just to mention a few issues) may create a domino effect and ultimately a late delivery of the forecast. We present and describe the quality and accuracy of the MREA\_07 simulations. We have deliberately assessed the prediction system for a generic application with minimum or no calibrations of the default physical and numerical parameters. Preliminary model/data comparison and new simulations in a pseudo forecast mode, but with different model parameters (such as increased vertical resolution) highlight the skills and limits of the default configuration.